

Errata for Amendment 48/48 Draft EA/RIR/IRFA
For Amending the Process by Which Annual Harvest Specifications Are
Established for Alaska Groundfish Fisheries Implemented Under the
Authority of the Fishery Management Plans for the Groundfish Fishery
of the Bering Sea and Aleutian Islands Area and Groundfish of the Gulf
of Alaska

September 2003

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The only prohibited species that may be affected by the action is salmon under Alternative 3. The shifting of the fishing year provided less time to the pollock industry to harvest their B season apportionment which may result in more fishing during a period of higher salmon bycatch rates. This would be of more concern during years of high pollock TAC. The effect is unknown because of actions that the pollock industry may take to reduce the potential bycatch.

All of the alternatives may have temporal effects on the groundfish fisheries, posing difficulties in complying with Steller sea lion protection measures. These measures include the temporal dispersion of harvest of prey species to reduce the likelihood of competition between the groundfish fisheries and Steller sea lions. If biomass is falling, it is possible that the projected first seasonal apportionment may exceed the Steller sea lion protection measures. Inseason actions or emergency rulemaking may be used to reduce the first seasonal apportionment and possibly mitigate any potential effects on Steller sea lions. Because of the potential to mitigate the effects through conservative setting of TAC and regulatory action exists, the effects on the temporal harvest of prey on Steller sea lions is unknown. Under Alternative 3, current seasons may need to be adjusted for BSAI pollock and Pacific cod trawl fisheries to meet Steller sea lion protection measures and to coincide with the July 1 through June 30 fishing year.

Table ES-1 Effects on Environmental Components Comparison of Alternatives 2, 3, and 4 to Alternative 1 and 5

Environmental Component	Alt. 2	Alt. 3	Alt. 4
Groundfish Target species	Higher potential to set TAC over the OFL for short lived species. Higher biomass amounts over time.	Potential to set TAC over the OFL between Alt. 2 and Alt. 1. Biomass levels between Alt. 2 and Alt. 1. Similar to Alt. 5 if additional proposed rule required.	Potential to set TAC over the OFL higher than Alt. 2. Higher biomass amounts than Alt. 2 over time.
Prohibited Species	Same as Alt. 1 and 5	Possible increase in salmon bycatch in the BSAI pollock fishery	Same as Alt. 1 and 5
Steller sea lions	More potential for indirect effect from harvest uncertainty than Alt. 1, 3, and 5. Temporal harvest of prey effects similar to Alt. 1 and 5	Less potential for indirect effect from harvest uncertainty than Alt. 2 but more than Alt. 1 and 5. Temporal harvest effects similar to Alt. 1 and 5.	More potential for harvest uncertainty than Alt. 2. Temporal harvest effects likely to be more than Alt. 2

Regulatory Impact Review

The Regulatory Impact Review (RIR) addresses the requirements of Presidential Executive Order (E.O.) 12866 for a benefit-cost analysis of the proposed action and its alternatives. A complete benefit-cost analysis was not possible. The information is not available to estimate dollar values for many of the benefits and costs. Moreover, the proposed action affects the conditions under which the Council and Secretary will make decisions about future TAC specifications. The actual benefits and costs will depend on the decisions made by the Council and Secretary, and those decisions cannot be predicted at this time. The RIR does examine a set of outcomes from this action that may affect the benefits and

2.4 Implementation Process for Alternatives

Figure 2.3 shows the implementation process for revising the FMPs and implementing Alternatives 2 or 4. In Figure 2.3, the Council makes a final recommendation in October 2003, proposed and final rule making for the harvest specifications process would need to be completed before April 2004 to allow the Council to make a final harvest specifications recommendation for 2005 (and 2006 for Alternative 4) under the new administrative procedure. At the same time, the 2004 harvest specifications would need to be implemented by proposed, interim, and final rulemaking as the new process is being put in place. Proposed and final rulemaking for 2005 harvest specifications would happen in June and October 2004, respectively so those specifications will be in place by January 2005.

In Figure 2.2, Alternative 3 would have a similar FMP amendment approval and rulemaking process as Alternatives 2 or 4 for revising the harvest specifications process. Regulatory action for implementing the FMP amendments may occur later in 2004 compared to Alternative 2 because harvest specifications under Alternative 3 need to be effective 6 months later than under Alternative 2. Establishing the harvest specifications for 2004 would be done by proposed, interim, and final rulemaking as currently specified in the regulations. FMP amendments and regulatory amendment for the harvest specifications process would be completed in 2004, including proposed and final rulemaking for harvest specifications for January through June 2005 and January through December 2005 for sablefish, with Option 1. In December 2004, the Council would recommend July 2005 through June 2006 harvest specifications, and January through December 2006 sablefish TAC, if Option 1 is implemented. Proposed and final rulemaking for the July 2005 through June 2006 harvest specifications would be completed in the first half of 2005.

Figure 2.2: Alternative 3: Amendments 48/48 Implementation Schedule

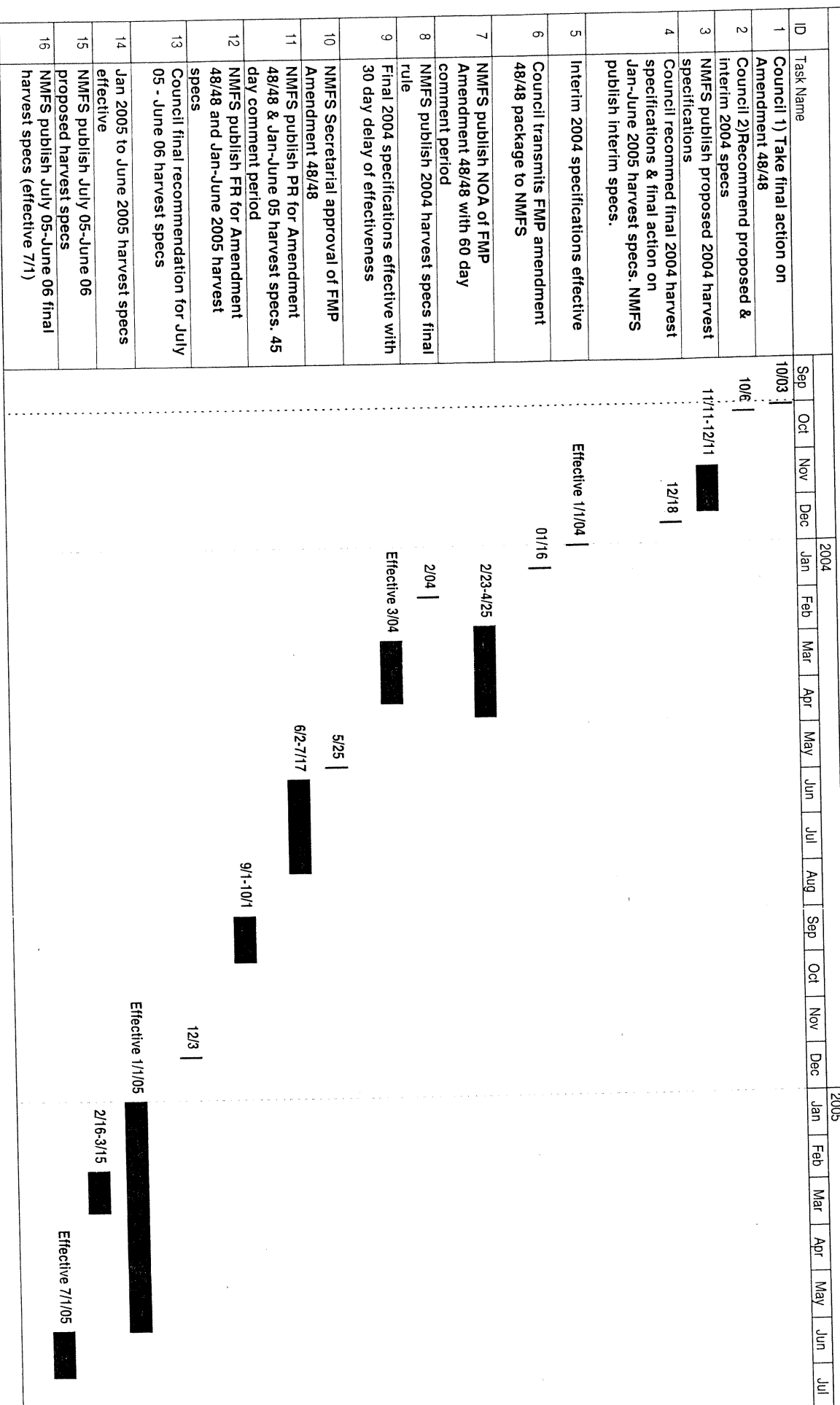


Figure 2.3 Rulemaking Schedule for Implementing Alternatives 2 and 4 Harvest Specification Process

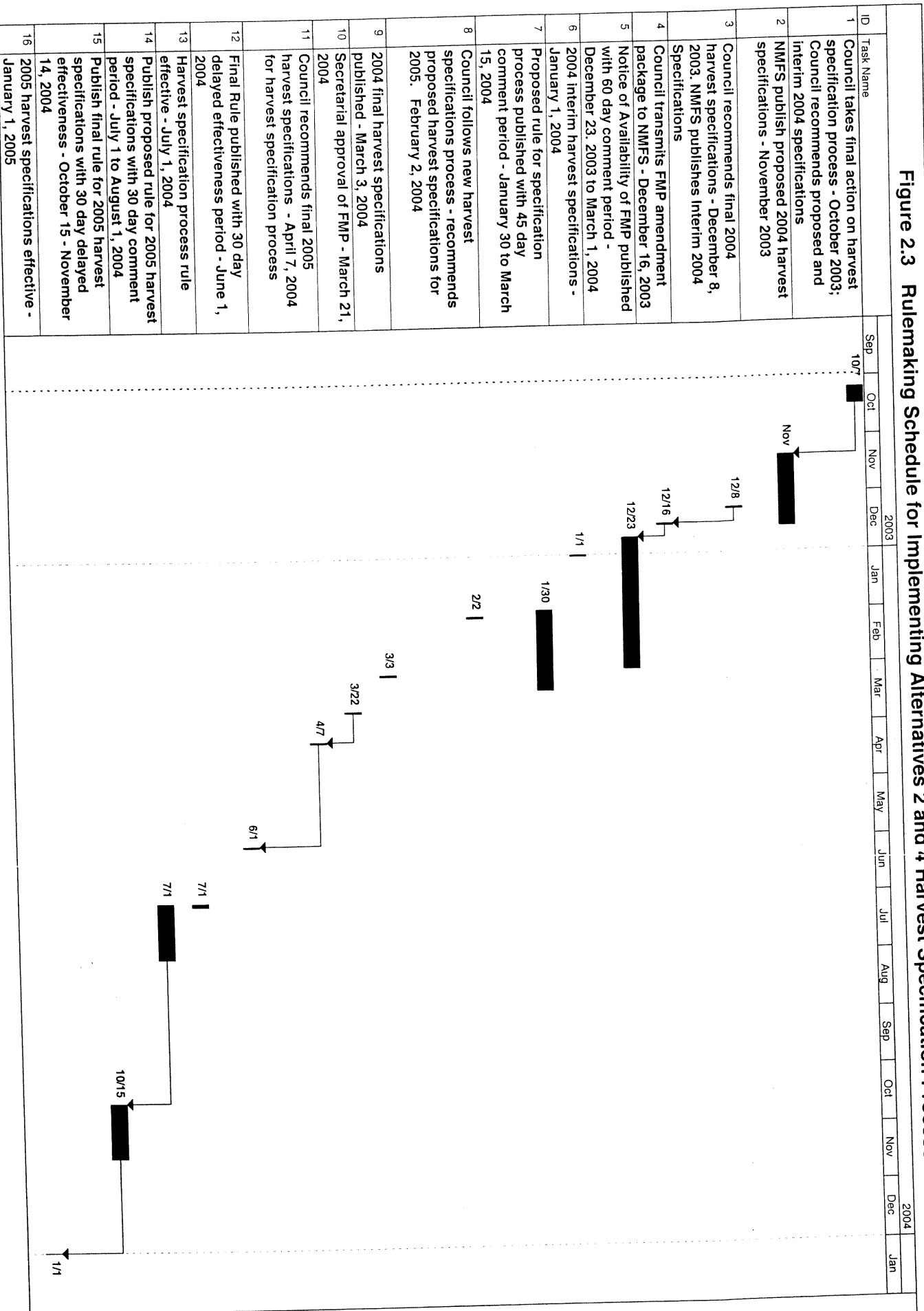
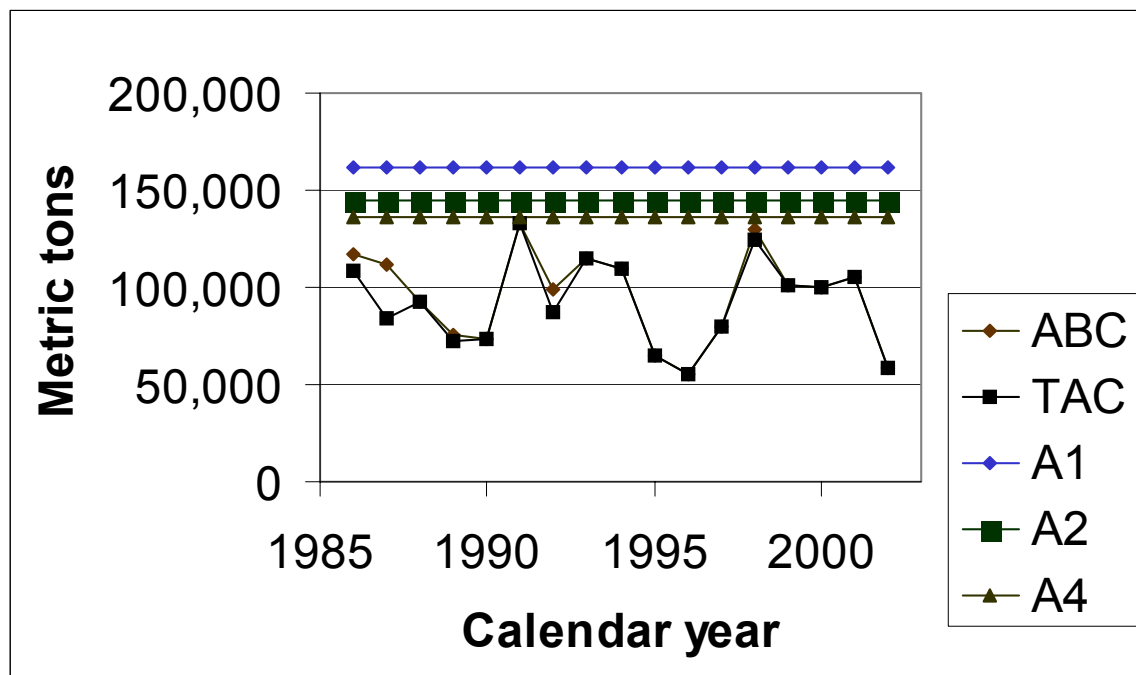


Figure 4.2 GOA pollock TAC and ABC, 1980 to 2002, compared to mean Alternative 1, 2, and 4 ABC projections from the simulation model



4.1.3 Results and Discussion

For the retrospective analysis, it was not always possible to obtain an ABC recommendation under Alternative 2 in exactly the same way as under Alternative 1. In some years the ABC recommendation was revised (e.g., by the SSC) for the coming year but not the subsequent year, as would be required under Alternative 2. For example, in one projection for EBS pollock the Alternative 2 ABC was 1.54 million tons whereas for Alternative 1 it was 1.13 million tons. In some years for some stocks, it was not possible to project the Council recommendations explicitly and only the projected ABC levels were possible. In these cases, it may have been possible to exceed the 2-million ton cap for the BSAI, consequently, the realized hypothetical catches would have been lower.

With these caveats in mind, the results are presented in Figure 4.3 and Table 4.1-1. For the four stocks where retrospective examinations were possible, the pattern of recommended catch levels are quite similar under the two alternatives but with a regular lag. Under Alternative 2, the declines and increases often follow similar trends found in Alternative 1, but one year later. The variability of catch is greater for two out of the four stocks under Alternative 2, while the average annual change in catch is greater for all four stocks.

Similar patterns were observed for the simulation model results. The variability in catch generally increases under Alternatives 2 and 4 relative to Alternative 1 (Figs. 4.4-4.9; Table 4.1-2). The Gulf of Alaska pollock, BSAI Pacific cod (although only slightly), and Atka mackerel catch simulations under Alternative 4 were less variable than under Alternative 2. This was presumably due in part to the fact

The following paragraphs replace the introductory paragraphs in Section 4.5, Effects on Steller sea lions pages 106 and 107:

4.5 Effects on Steller sea lions

The groundfish fisheries may have direct impacts on Steller sea lions by incidental catch and entanglement of the animals during groundfish harvest and illegal shooting of the animals. Indirect effects include competition for prey species over time and space, and disturbance of the animals. Because this action would not change fishing practices, there are no effects on incidental catch, entanglement, illegal shooting or disturbances expected. However, potential effects are possible over competition for prey resources under a couple of scenarios (see discussion below).

The direct and indirect effects of the pollock, Pacific cod, and Atka mackerel fisheries were analyzed in the Steller sea lion SEIS, Section 4.1.1 (NMFS 2001b). Alternatives 2, 3, 4, and 5 are expected to have insignificant effects on the western and eastern DPSs of Steller sea lions. The revised draft PSEIS (NMFS 2003b) established significance criteria for the harvest of prey species as a change of no more than 20 percent of the baseline fishing mortality rate. Alternatives 1, 2, and 4 were analyzed in section 4.1 for differences in fishery mortality rate over a 1,000 year simulation (Table 4.1-2). Neither alternatives 2 nor 4 resulted in more than 20 percent increase in fishing mortality rate compared to Alternative 1. Alternatives 3 and 5 are considered to have fishing mortality rates between Alternatives 1 and 2. All of the alternatives have considerations regarding temporal harvest of prey species. This is further explained below under each alternative.

The Steller sea lion protection measures address the competition between the groundfish fishery and the western DPS of Steller sea lions (see regulatory changes at 68 FR 204; January 2, 2003). The protection measures modify the existing harvest control rule to ensure that biomass levels (of important prey species for sea lions) are not adversely modified by fisheries. The strategy employs the protection of key foraging areas (i.e., 0-10 nm from rookeries and haulouts), distribution of catch seasonally, and in some cases catch limitations by area in order to avoid localized depletion of especially vulnerable prey species (e.g. Atka mackerel). None of the alternatives considered here would affect the spatial dispersion elements of the conservation strategy. Additional information on Section 7 consultations under the ESA for the groundfish fishery for Steller sea lions and all other listed species can be found in the 2001 BiOp (NMFS 2001b, appendix A) and in the FMP BiOp (NMFS 2000).

One potential for adverse impacts to Steller sea lions (from alternatives 2, 3, 4, and 5) would arise from a scenario in which the target species (e.g., pollock, Pacific cod, and Atka mackerel) showed a sharp decline that was not anticipated from the stock assessment. GOA pollock is an example of a stock with uncertain stock dynamics resulting in difficulties in obtaining accurate stock projections. In recent years, there has been a more rapid decline in stock size than projected by assessment, mostly due to an apparently strong 1994 year class that did not show up in large numbers in the fishery or in subsequent surveys. This resulted in actual fishery harvest rates higher than expected, nearly reaching the OFL limit in 2001. Although the assessment has numerous risk-averse approaches built in, historically this stock has been difficult to assess accurately. Recent reviews (i.e., CIE review, MSC draft report) support the argument that this fishery is assessed in a risk-averse manner, yet it is possible that poorly understood changes in the environment or the ecosystem are having an effect on stock dynamics not built into the assessment. Uncertainty in the ABC projection increases rapidly each further year that is projected forward.

Moving to a strategy that employs using stock assessment data that is older than one year and fishing on TACs which are based on a two-year projection may result in an over-harvest of the target species in the

first half of the year (under the scenario described above for GOA pollock), unless TACs are set conservatively. From a single-species fishery perspective, this may not pose a substantial problem unless the stock is being affected by high fishing rates on the spawning aggregation. Any overage in the first season would be "made up" by decreasing the harvest in the second half of the year. However, from a sea lion perspective this is not ideal as the current conservation strategy is to spread catch out through the year in an effort to reduce harvest rates in the first half of the year and avoid seasonally compressed fisheries. Additionally, directed fishing is not allowed for pollock, Pacific cod, or Atka mackerel when the female spawning biomass declines below 20% of the theoretical unfished level. We would be aware of this potential problem in November/December before the fishery starts in January of the next year. At this point we would have new survey information and new assessments which more accurately assess the appropriate harvest amount for the next year (based on the most recent information), or whether the stock was too low to allow a harvest.

In December, the Council and NMFS would have a couple of options. First, we would need to assess whether the change in the stock assessment is substantial and would require a change to the TACs. In other words, is the difference in the TAC from what is currently in place (from the two year projection) likely to adversely affect Steller sea lions based on the new information? Two scenarios are likely in which adverse impacts would accrue to the western DPS of Steller sea lions: (1) if the TAC is above the revised OFL limit from the new assessment, and (2) if the female spawning biomass is determined to be below the 20% level. If either scenario occurs (or any other scenario in which the Council or NMFS determine is substantially adverse), then NMFS would need to rapidly promulgate an emergency rule in order to modify the TAC for that particular stock in order to avoid causing negative effects to the western DPS of Steller sea lions. Under this scenario, the customary public comment period on the TAC modification would likely be waived for good cause as immediate implementation would be necessary to avert significant adverse effects on Steller sea lions and their critical habitat. Therefore, public comment is especially requested on this aspect of the proposed action. This process is a necessary fail-safe for the preferred alternative to insure that Steller sea lions are not jeopardized or their critical habitat is not adversely modified (as described under the conservation strategy in the 2001 BiOp). Without the ability by NMFS to rapidly respond to unpredictable changes in the natural environment, this action could potentially result in substantial adverse impacts to the endangered western DPS of Steller sea lions. Therefore, that ability is critical to the implementation of this action.

In summary, this action in itself does not result in any new adverse impacts to Steller sea lions that have not already been considered under the FMP BiOp and the 2001 BiOp (and supplement). However, unpredicted biomass declines might occur which could result in substantial adverse impacts to Steller sea lions or their critical habitat. In such circumstances, the emergency rule-making provision of the Magnuson-Stevens Act authorizes NMFS to alter the TAC sufficiently to avoid those adverse impacts.

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